

REMARKS

In the Examiner's "Response to Arguments" in paragraph 2 on page 2 of the Examiner's Office Action letter, the Examiner notes that the features upon which the Applicant relies, that is, the scanner or device parameters that control the process of making a mapping from the image on paper to a bitmap image in memory and in addition that the original moves along a fixed optical arrangement of the apparatus, are not recited in the rejected claims. In this regard the Examiner should note that claims 1 and 10 have been amended to recite the features referred to by the Examiner. Thus, claim 1 now recites a method for calibrating a transport scanner apparatus arranged for scanning a 2-dimensional original by moving the original along a fixed optical arrangement of the apparatus. Furthermore, in addition, claim 1 has been amended to further recite that the control of the device parameters "controls the process of making a mapping from an image on the 2-dimensional original to an electronic image in memory." Also, apparatus claim 10 has been amended in a similar manner as claim 1 of the present application. Thus, it is believed that independent claims 1 and 10 now recite the various features noted by the Examiner which cannot be found in any other references relied upon by the Examiner, either alone or in combination.

Claim 10 has been rejected by the Examiner under 35 U.S.C. § 102(b) as being anticipated by Yun et al., (U.S. Patent No. 6,411,405). Claim 1 has been rejected by the Examiner under 35 U.S.C. § 103(a) as being unpatentable over Yun et al. in view of Motamed, U.S. Patent No. 7,212,312. Claims 2, 3, 6 and 8 have been rejected by the Examiner under 35 U.S.C. § 103(a) as being unpatentable over Yun et al. in view of Motamed as applied to claim 1 in further in view of Horobin, U.S. Patent 7,106,477. Claims 4 and 5 have been rejected by the Examiner under 35 U.S.C. § 103 (a) as being unpatentable over Yun et al. in view of Motamed, in view of Horobin as applied to claim 3 and further in view of Sato, U.S. Patent 5,245,440. Claim 7 has been rejected by the Examiner under 35 U.S.C. § 103(a) as being unpatentable over Yun et al. in view of Motamed as applied to claim 1 and further in view of Lodwick, U.S. Patent 6,226,419. Finally, claim 9 has been rejected by the Examiner under 35 U.S.C. § 103(a) as being unpatentable over Yun et al. in view of Motamed and further in view of Horobin as applied to

claim 8 and further in view of Fukuda, U.S. Patent 6,624,876. These rejections are respectfully traversed.

The present invention is directed to a method for achieving a 1:1 format size or for the geometric calibrating of a feed through scanner or transport scanner that is arranged for scanning a 2-dimensional original and forming an electronic image for subsequent usage in an appropriate information handling system. The scanning device is governed by a number of scanner or device parameters that control the process of making a mapping from the image on paper to a bitmap image in memory. These parameters are mainly determined by the design of the scanning device. However, due to inaccuracies, for example at production, when assembling the device, or due to environmental circumstances, parameters may deviate from intended values. Consequently, the bitmap of a scanned image will not be an exact copy of the original image. The method and apparatus according to the present invention analyze the bitmap image resulting from the test original, derives differences from the intended values and calculates correction values for the respective parameters. Upon correction of these parameters, the conversion process from the image on a page to the image in memory will result in a true mapping, despite differences, in particular, instances of the scanning devices.

The Yun reference, which is the primary reference relied upon by the Examiner in rejecting the claims of the present invention, addresses a totally different problem when compared to the present invention and thus uses other measures to solve its particular problem. Thus, the Yun reference is directed to a method for correcting scanning errors in a shuttle type of a scanner, including the steps of scanning a pattern sheet on which pattern data having a specific shape are recorded. A shuttle type of scanner as addressed in the Yun reference is a completely different type of scanner when compared to the transport scanner which is under consideration in the present application. According to the present invention, in a transport scanner, the original moves along a fixed optical arrangement of the apparatus whereas in a shuttle scanner as defined in the Yun reference, the optical arrangement moves over the original in bands. This moving in bands causes particular problems, and the Yun reference proposes to solve these problems in a particular manner. Thus the problem that the Yun reference addresses is visible connection

errors of the bands due to a skew in the optical arrangement. The Yun reference uses a pattern sheet for this purpose and correction figures are calculated and the customer has to enter this information in order to obtain correction.

In contradistinction to the teachings of the Yun reference, the problem solved by the present invention is for a feed through scanner to obtain a copy of an original image that is 1:1 conforming with the original image. Banding is not a problem that is addressed in the present application and thus the Applicant's solution to its problem is totally different from that of the Yun reference. Thus the solution proposed by the present invention is a one time scanning of a test chart, with nothing more being required by the user, and automatically, the system enables that all kind of geometrical errors are nullified. Since the Yun reference does not disclose a feed-through scanner type, it is directed to solving a completely different problem when compared to the present invention, it cannot possibly suggest the Applicant's solution to its particular problem as defined by the present application. Above this the Yun reference does not cater to automatic compensation. Thus the Yun reference can not possibly anticipate the Applicant's inventive contribution.

Because of the deficiencies in the Yun reference, and because the secondary references relied upon by the Examiner do not fill these deficiencies, it is believed that the rejection of the claims over various combinations of references as noted in paragraphs 5, 6, 7, 8, and 9 can not possibly suggest the present invention. Thus, as previously indicated the Yun reference does not disclose a feed thorough scanner type and thus does not address the same problems as the problems address in the present invention. In addition, the Yun reference does not contemplate automatic compensation and although the Motamed reference discloses automatic compensation, it does so for an image and an image density setting and with a test chart which is very dissimilar to that purposed in the present application. Furthermore, the Horobin reference relied upon by the Examiner does not disclose an automatic method and furthermore, according to the method disclosed in the Horobin reference, a copy is made from a test chart and it is the copy that the user will use to make compensation settings. This is quite different from the method of the

present invention where it is only necessary to scan the test chart once with no other steps being required.

Clearly, amended claims 1 and 9 define an inventive contribution which is not suggested by any of the references relied upon by the Examiner, either alone or in combination.

Accordingly, in view of the above amendments and remarks reconsideration of the rejections and allowance of all of the claims of the present application are respectfully requested.

In the event that the proposed Amendment does not place the present application into condition for allowance, entry thereof is respectfully requested as placing the present application into better condition for appeal.

Should there be any outstanding matters that need to be resolved in the present application, the Examiner is respectfully requested to contact Joseph A. Kolasch Reg. No. 22,463 at the telephone number of the undersigned below, to conduct an interview in an effort to expedite prosecution in connection with the present application.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies to charge payment or credit any overpayment to Deposit Account No. 02-2448 for any additional fees required under 37.C.F.R. §§1.16 or 1.17; particularly, extension of time fees.

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Respectfully submitted,

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